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THE

CABINET

OF

NATURE AND PHILOSOPHY.

BOOK THE FIRST.

THE CABINET OF

Shells.

BY WILLIAM HUNT, M. D. &c.

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THE

CABINET OF SHELLS:

BEING

AN INTRODUCTION

TO THE

STUDY OF THE SCIENCE

OF

Conchology,

AFTER

THE SYSTEM OF LINNÆUS.

The Drawings in this work represent a Species of each of the Genera of Shells, taken from nature.

The work also contains a description of the Class, Orders, Genera, and number of Species enumerated, the Classic and Modern English names, and that of the animals inhabiting shells.

THE

CABINET OF SHELLS.

CERTAIN ANIMALS,

Principally inhabiting the waters of the earth, (*having no bones,*) are furnished with a covering of an indurated and variegated substance termed Shell, hence called *Testaceous Animals*, or *Shell Fish.*

Of these there are immense varieties. Some are covered with many shells, and called MULTIVALVE; some existing between two shells, and are called BIVALVE; and others inhabiting a single shell only, and are called UNIVALVE.

These Shells seem to serve the double purpose of houses of residence and as castles of defence.

There are, however, two kinds of Shell Fish inhabiting the ocean. The one termed CRUSTACEOUS, and the other TESTACEOUS. A work on Conchology would embrace both Classes.

The Phosphate of Lime constitutes the base of the shells of the CRUSTACEA. They are slightly elastic ; furnished with joints ; the animals having the power of moving them at will. Among these are the *Lobster*, the *Crab*, the *Limpet*, &c.

THE TESTACEA

have not these peculiarities ; the base of these shells being Carbonate of Lime, they have no elasticity. Another important distinction is, the different appearances they assume. Some are calxy, having a dry, chalky appearance ; some have a transparent, superficial, shining covering, like enamel ; and others are covered with a sort of cuticle or skin, under which the shell exists, mostly consisting of Pearl, or Mother-of Pearl.

Among the enamelled or porcellaneous shells are the Tellena, the Donax, the Cypria, &c.

Among the cuticulated shells are the Oyster, Muscle, Nautilus, some species of Haliotis, &c.

THE ANIMALS,

which inhabit the Testacea are the *Doris*, *Triton*, *Ascidia*, *Tethys*, *Limax*, *Spio*, *Amphitrite*, *Terebella*, and *Nereis*.

For a particular description of the animals, the shells, and other interesting matters relating thereto, the reader is referred to John Warren's Book on Conchology, lately published in Boston. The curious, or those wishing to make collections, will receive much satisfaction by calling to see his Cabinet in Tremont-Street. It consists of an immense and beautiful collection of shells, with many rare and valuable Species.

THIS THEORY,

or Outline of the Testacea, does not admit of a full description of shells or of their habitudes ; but it is a fact worthy of observation, that their variety and beauty attracted the attention of the earliest philosophers.

THE SCIENTIFIC ARRANGEMENT OF SHELLS

was completed by the immortal Charles Linnæus, M. D. who was born in Sweden, in the year 1707. To this great naturalist we are indebted for the following simple and comprehensive arrangement of the science.

He has divided the

CLASS TESTACEA

into three ORDERS, containing thirty-six GENERA. (*See the plates.*)

Order 1st. Multivalve, or many shells.

Order 2d. Bivalve, or two shells.

Order 3d. Univalve, or one shell.

In the order MULTIVALVE are three Genera :

Genus 1. Chiton, or Coat of Mail. The animal a Doris.
Of this Genus are 40 Species.

Genus 2. Lepas, or Acorn shell, or Barnacle. The animal a Triton.
Of this Genus are 43 Species.

Genus 3. Pholas, or Stone-piercer. The animal an Ascidia.
Of this Genus are 12 Species.

In the order Multivalve are ninety-five Species, each having a separate name, as Chiton Squamosus, Chiton Bistriatus, &c.

In the order BIVALVE are fourteen Genera :

GENUS				
1. Mya, or Gaper.	The animal an Ascidia.	Of the genus Mya, are	40	species.
2. Solen, or Razor-sheath.	.. do.	Solen.	35	..
3. Tellina, or Tellen.	.. Tethys.	Tellin.	81	..
4. Cardium, or Heart, or Cockle shell.	.. do.	Cardium.	47	..
5. Mactra, or Kneading-trough.	.. do.	Mactra.	42	..
6. Donax, or Wedge-shell.	.. Tethys.	Donax.	24	..
7. Venus.	.. do.	Venus.	115	..
8. Spondilus, or Thorny Oyster.	.. do.	Spondilus.	10	..
9. Chama, or Clamp, or Clam shell.	.. do.	Chama.	27	..
10. Arca, or Ark-shell.	.. do.	Arca.	41	..
11. Ostrea, or Oyster, Scollop, or Picten.	.. do.	Ostrea.	88	..
12. Anomia, or Antique Lamp.	.. Peculiar.	Anom.	30	..
13. Mytillus, or Muscle-shell.	.. Ascidia.	Myt.	46	..
14. Pinna, or Sea-wing, or Fin-shell.	.. Limax.	Pin.	21	..

In the order Bivalve are six hundred and forty-seven Species, with names, as Mya Glicomires, Mya Truncata, &c. &c.

In the Order UNIVALVE are nineteen Genera—fourteen with regular spires, and five without regular spires.

GENUS					
1. Argonauta, or Paper-sailor.	The animal a Sepia.		Of the Genus Argonaut, are 9 species.		
2. Nautilus, or Pearly sailor.	..	Peculiar.	Nau.	36	..
3. Conus, or Cone shell.	..	Limax.	Conus.	265	..
4. Cypria, or Cowry.	..	do.	Cyp.	73	..
5. Bulla, or Dipper, or Bubble.	..	do.	Bul.	54	..
6. Voluta, or Scroll.	..	do.	Vol.	199	..
7. Buccinum, or Whelk.	..	do.	Buc.	161	..
8. Strombus, or Wing'd, or Claw shell.	..	do.	Str.	46	..
9. Murex, or Trumpet, or Rock shell.	..	do.	Mu.	171	..
10. Trochus, or Top shell.	..	do.	Troch.	129	..
11. Turbo, or Turban, or Wreath shell.	..	do.	Turb.	167	..
12. Helix, or Snail shell.	..	do.	Hel	192	..
13. Nerita, or Hoof shell.	..	do.	Ner.	67	..
14. Haliotis, or Ear shell.	..	do.	Hal.	22	..
Five Genera without regular spires :					
1. Patella, or Dish shell.	..	Limax.	Pat.	107	..
2. Dentalum, or Tooth shell.	..	Terebella.	Dent.	15	..
3. Serpula, or Worm shell.	..	do.	Ser.	40	..
4. Teredo, or Ship Worm	..	do.	Ter.	4	..
5. Sebella, or Gravel shell.	..	Nereis.	Seb.	24	..

In the Order Univalve are one thousand seven hundred and seventy-two species, with names ; as Argonauta Argo,—Argonauta Tuberculata, &c. &c.

In the three orders of shells, there are two thousand five hundred and forty-one species enumerated; and there are, no doubt, many more. A cabinet, containing a specimen of each, would be almost invaluable; yet a collection can be made of several specimens of each Genus for a trifling sum, and may be arranged according to the preceding outline; which will lead the young amateur to make inquiry into the name and character of each species so collected, and the animal and its peculiarities inhabiting each shell; and he will become acquainted with the terms used by conchologists in describing shells. Indeed, this little sketch of the science is fully enough completed, to lead those wishing to become acquainted with this fashionable study into the right path.

Since the time of Linnæus several conchologists have attempted to form novel and popular theories of the science—but there is none so easy of attainment, or so well adapted to facilitate the study as this of Linnæus. Among the moderns, the System of Lamark is thought most worthy of attention.

Should the present work meet with encouragement as a Manuscript for the Cabinet of Conchologists, a succeeding number will be immediately published, containing an Outline of the System of Lamark, with drawings of the one hundred and ninety-two Genera; and an extra plate, containing perspective drawings of the wonderful and curious internal structure of some remarkable Shells; also a discriminative distinction of the Hinges of Bivalves.

In conclusion, after becoming familiar with the Class, Orders, and Genera, according to the Linnæan System, the transition to particulars will be perfectly easy to the learner. Every Science creates a language that is peculiarly its own. So Conchologists, in describing shells, use epithets and terms appropriate to the subject.

A TABLE OF TERMS.

Abarticulation,	moving joints.
Abbreviated,	shortened.
Abrupt,	craggy, broken.
Acera,	without a horn.
Acute,	not blunt.
Adherent,	sticking to.
Alveolate,	having cells.
Amphitrite,	one of the nerieds.
Annular,	round, like a ring.
Aperture,	the opening.
Apex,	the top, or the upper point of the spire.
Approximate,	near to.
Arched,	bent, like an arch.
Area,	the anterior slope, on which the ligament is placed.
Areola,	the posterior slope.
Auriculated,	appendages like ears.
Base,	applicable to shells with spires, opposite the apex.
Beak,	the summit of Bivalves.
Bifid,	separated at the top.
Body,	the last whorl of a Univalve.
Byssus,	filaments by which the animal adheres to foreign bodies.

Calcareous, - - - - - - - of the nature of lime.
Callus, or Callosity, - - - elevation of the enamel about the aperture.
Calxy, - - - - - - - - like chalk.
Cardinal (Teeth) - - - - under the apex, or beak.
Carinate, - - - - - - - like a keel.
Caudate, or Caudiform - - - a tail-like process.
Cicatrix, - - - - - - - - impressions where muscles were fixed,
Clavate, - - - - - - - - club-shaped.
Columella - - - - - - - - the pillar.
Connate - - - - - - - - parts adhering.
Contorted - - - - - - - - twisted.
Connivent, - - - - - - - approaching.
Convoluted, - - - - - - - rolled upon itself.
Cordate, or Cordiform - - - heart-shaped.
Corselet, - - - - - - - - the depression before the beaks.
Corneous - - - - - - - - resembling horn.
Crenate, or Crenulate, - - - scalloped at the margin.
Cretaceous, - - - - - - - chalky.
Crevice, - - - - - - - - a crack.
Crustaceous - - - - - - - shelly, with joints.
Cuneiform, - - - - - - - wedge-shaped.
Cuticulated, - - - - - - - having an epidermis.

Decorticated, - - - - - - with the outer skin removed.
Decussated, - - - - - - - crossing at right angles.
Deltoid, - - - - like a triangle.
Dentated, - - - - - - like a tooth.
Denuded, - - - - - - stript of covering, or the cuticle taken off.
Diaphragm, - - - - - - an interior transverse division.

Diffuse, - - - - - spreading.
Digitate, - - - - - - like fingers.
Discoidal, - - - - - like a whorl, or pulley.
Disc, - - - - - - the convex part of Bivalves.
Divaricate, or Divergent, - - spreading like a fan.
Dorsal, - - - - - on the back.

Echinated, - - - - - - set with spines.
Effuse, - - - - - - the lips separated by a gutter.
Emarginate, - - - - notched.
Epidermis, - - - - - - - the membraneous covering of a shell.
Equilateral, - - - the sides equal.
Equivalve, - - - - - - the valves equal and similar.
Escutcheon, - - - - - light armour. See Corslet.
Eroded, - - - - - - cankered, rusted, worn away.
Exserted, - - - - protruded, in opposition to inserted.

Facet, - - - - - - - - the flat surface of an interior valve.
Falciform, - - - - sickle-shaped.
Fixed, - - - - - - attached to.
Flexuous - - - - - - - alternately bent; waved.
Flaviatile, - - - - - - - - inhabiting rivers or fresh water.
Foramen, - - - - - a hole, or opening.
Foliaceous, - - - resembling leaves.
Fossa, - - - - a cavity to receive a tooth.
Fusiform, - - - - - spindle-shaped.

Grabous, - - - - - bulging out.
Geminate, - - - - - in pairs.

Hyaline, - - - - see Transparent.

Imbricate, - - - - - like tiles, one over another.
Involute, - - - - - rolled inwards.

Labium, - - - - - the columella lip.
Labrum, - - - - - the outer lip.
Lamella, or Lamina - - a thin layer of scales.
Lenticular, - - - like a lens, or burning glass.
Ligament, - - - the substance that connects the valves.
Limbus, - - - - - circumference of the valves.
Linear, - - - with lines, parallel lines.
Lunated, - - - crescent-shaped.
Lunule, or Anus, - - the depression behind the beaks.

Mammilla, - - - nipple-like protuberances.
Monocerous, - - - one-horned.
Multiocular, - - - with many cells.
Multivalve, - - with more than two valves.

Nacre, - - - - - like pearl.
Nates, - - - see Umbo.
Nucleus, - - - - - a beginning, the first layer of a shell.
Nymphæ, or Labia, - - lip like ridges to which ligaments are attached.

Obsolete, in conchology, - worn away by age.
Opaque, - - - - - not transparent.
Operculum, - - - - the lid which closes the aperture.
Osseous, - - - - - like bone.

Parietes, - - - - - walls, or sides.
Patulous, - - - - - gaping.
Papyraceous, - - - - like paper.

Pectinated, - - - - - - like the teeth of a comb.
Pedicle, or Peduncle, - - the fleshy support of the Lepas.
Penultimate, - - - the last but one.
Posterior slope, - - - - - see Areola.
Pyriform, - - - - - pear-shaped.

Quadrate, - - - - - nearly square.

Ringent, - - - - - gaping.
Rostrum, - - - - - the elongated canal of univalves.

Securiform, - - - hatchet-shaped.
Septum, - - - - - a partition.
Sessile, - - - - - - fixed without a pedicle.
Sinus, - - - - - - a gutter, an excavation.
Sinuate, - - - - - indented, irregular margin.
Siphon, - - - - - - a tube passing through the chambers of the Nautilus, &c.
Squamose, - - - scaly.
Striæ, - - - - - thread-like lines.
Sub, (in composition) - approaching to, near.
Subulate, - - - awl-shaped.
Succinia, - - - amber-coloured.
Sulcus, - - - - - a grove, or furrow.
Summit, - - - the top, or apex.
Suture, - - - the lines between the whorls.

Tellina, - - - a swift fish.
Teredo, - - - a borer.
Testacea, - - - shells.
Testaceous, - - - shell-like.
Tortuous, - - - twisted, winding.

Transparent, - - - } clear, pervious to light, not
Translucent, - - - } opaque.
Tridentate, - - - three-toothed.
Trigonia, - - - - - three corners.
Truncated, - - - cut off square.
Tubercle, - - - - a small eminence.
Tubular, - - - - long and hollow.
Turbinated, - - - shaped like a top.
Turgid, - - - - swelled.

Umbilicus, - - - perforation in the centre of a univalve, visible underneath.
Umbo, - - - - the most prominent part near the beak.
Univalve, - - - with one valve, or shell.

Valve, - - - - a fold, or shell, as bivalve, two shells.
Varices, - - - - prominences, at the stage of growth.
Ventricose, - - - swelling in the middle.
Volute, - - - - a scroll.

Whorl, - - - a revolution of the spire.
Wiry, - - - thread-like.
Winding, - - - flexure, meandering.
Wingshell, - - - relative to insects.
Wreath, - - - twirled, like a turban.
Wrinkled, - - - furrowed, roughness.

Zone, - - - - a girdle, a division.

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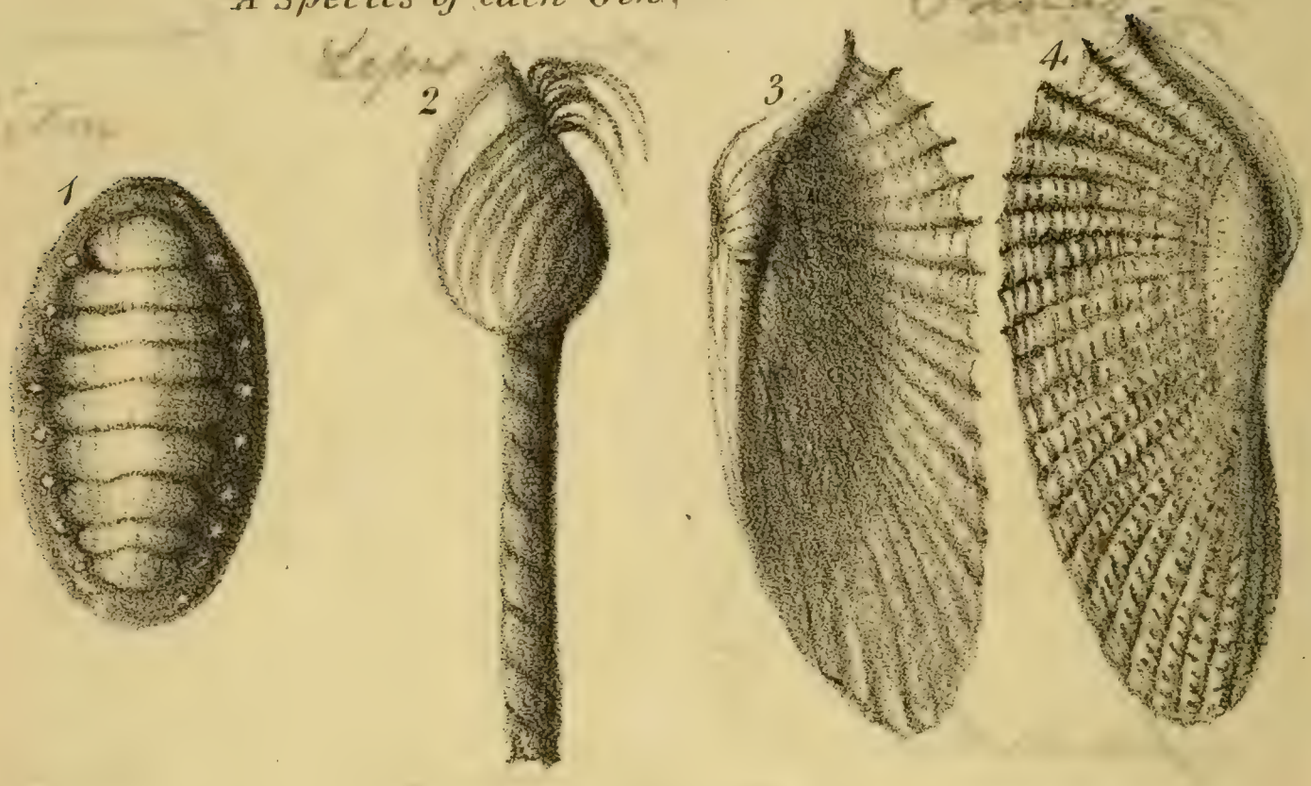
CABINET OF SHELLS.

CLASS TESTACEA

Order, Mullivalve.

Genera Three.

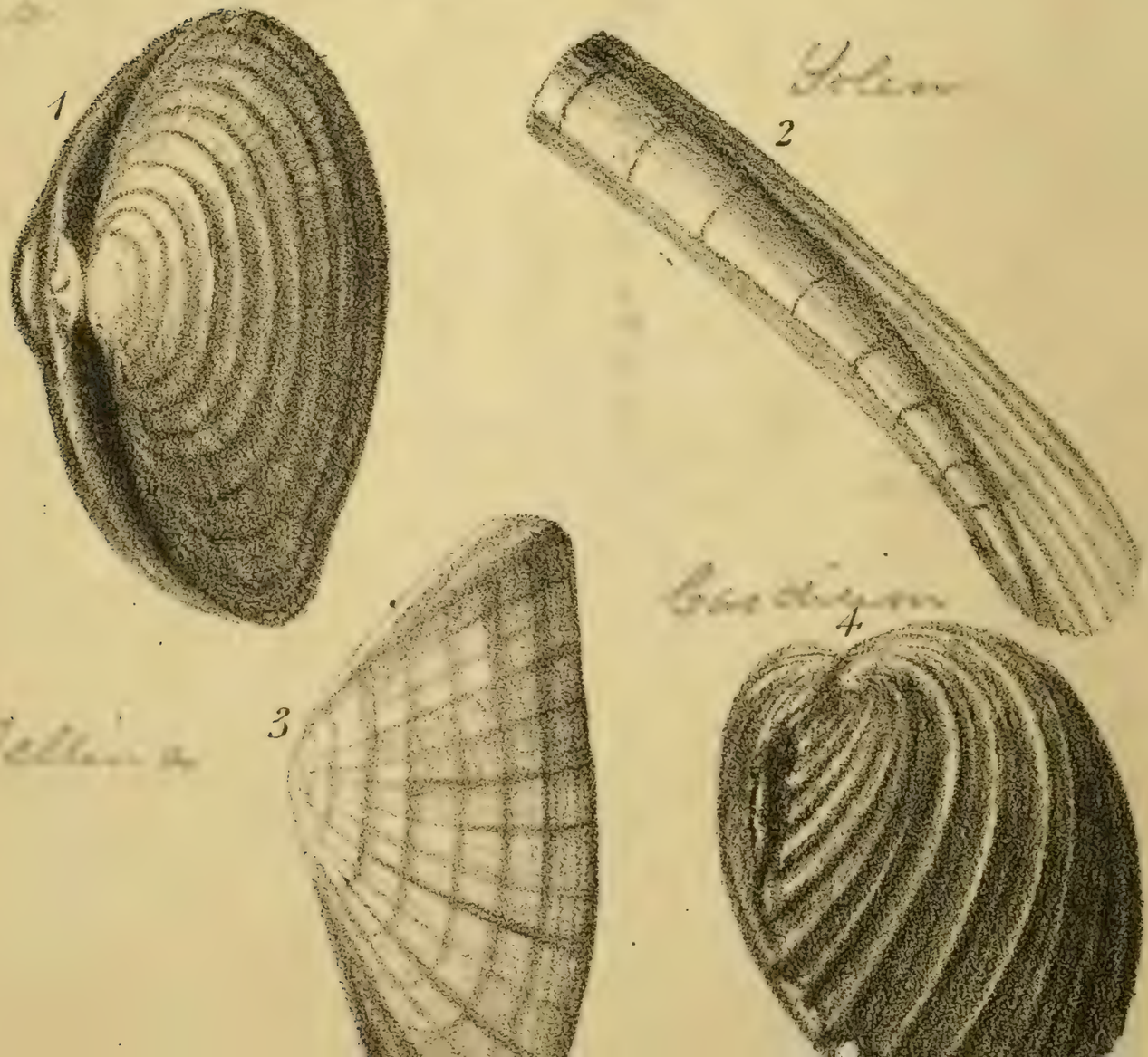
A Species of each Gen.



Order, Bivalve,

Genera Fourteen.

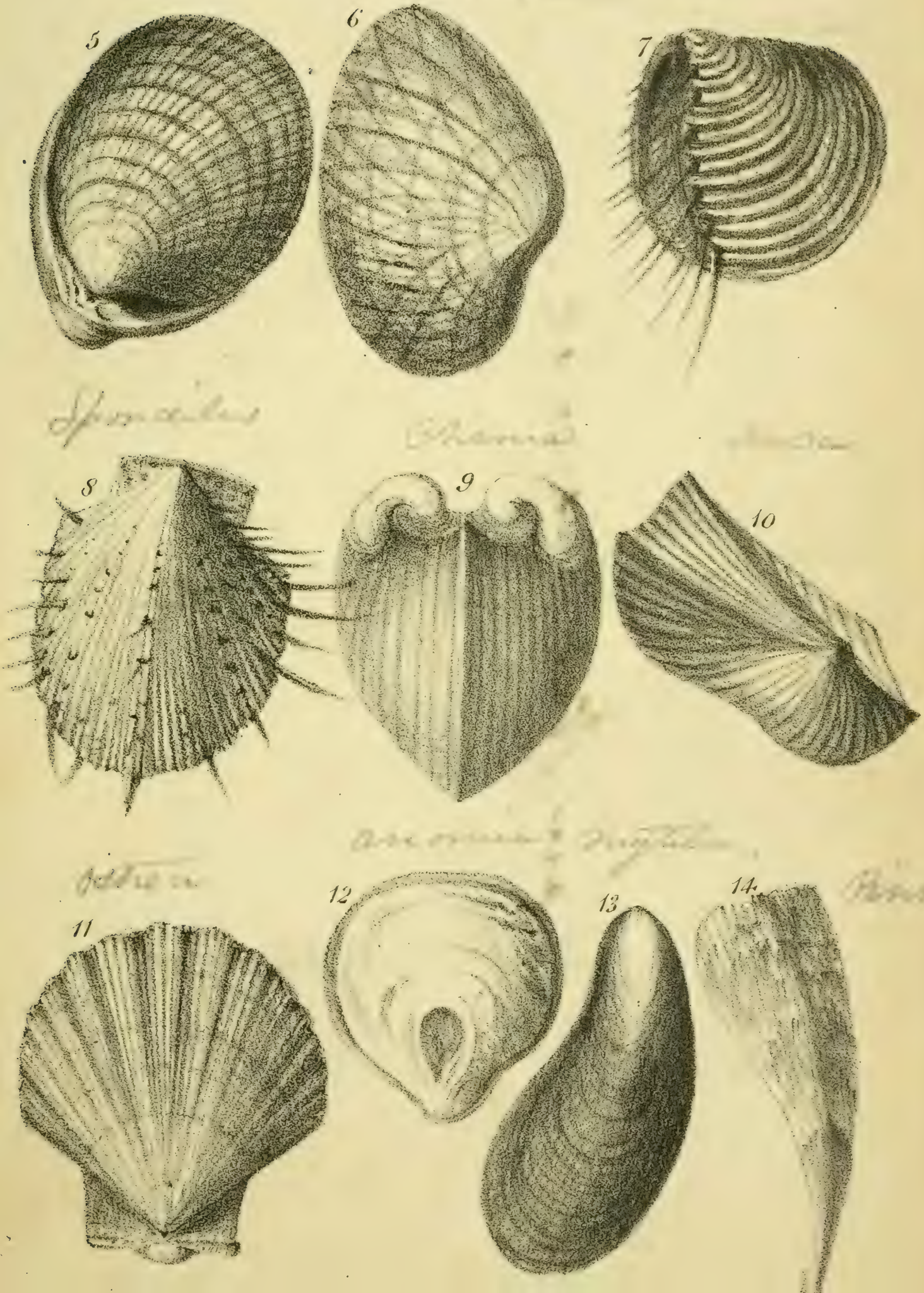
A Species of each Gen.



CLASS TESTACEA,

Order, Bivalve.

Genera.



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CABINET OF SHELLS.

CLASS TESTACEA,

Order Univalve.

Genera Fourteen, with regular Spines.

A Species of each Gen.

1

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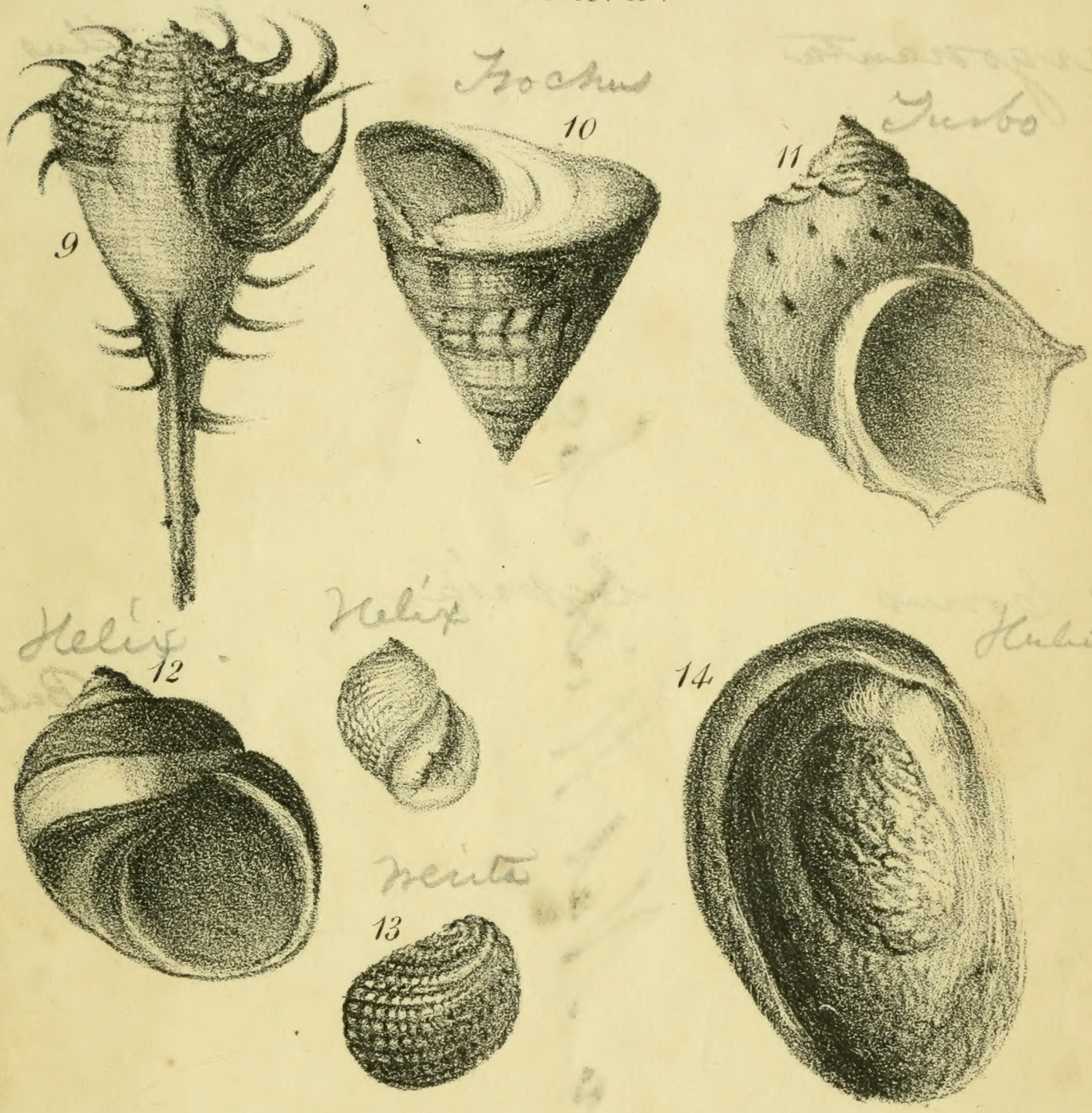
8

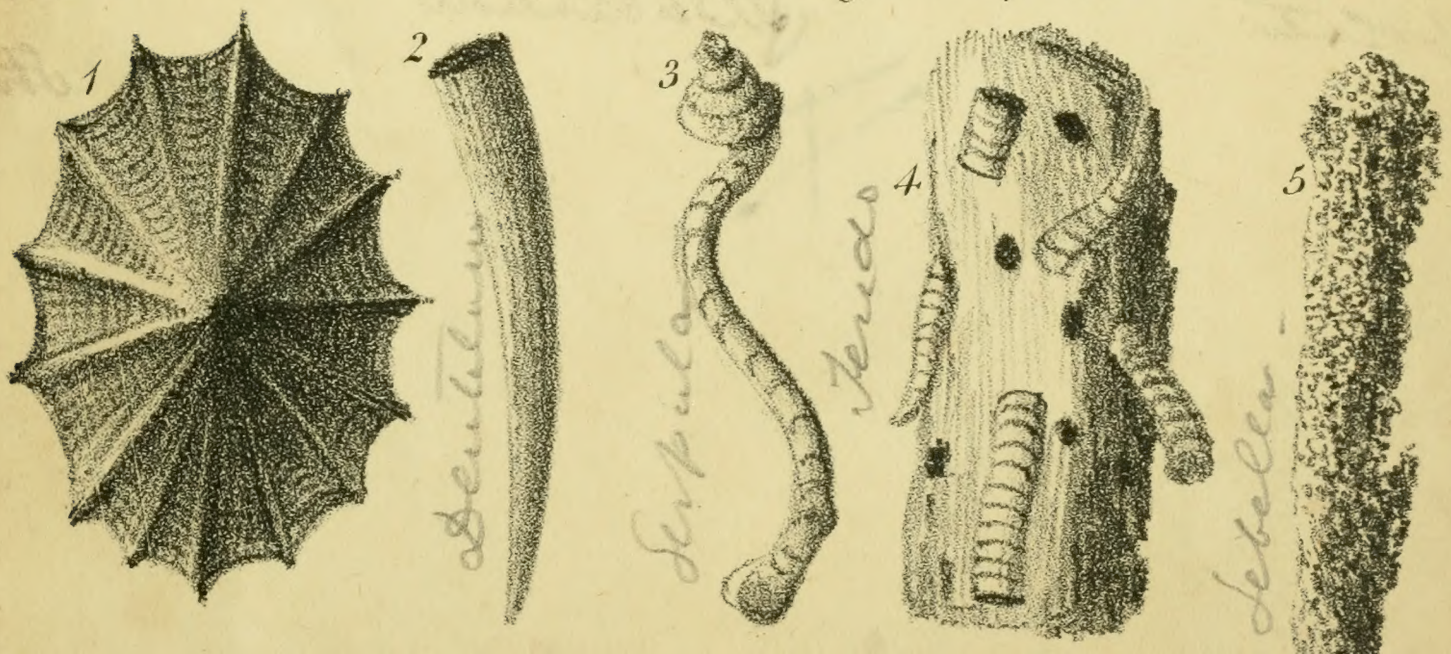
CLASS TESTACEA.

Order Univalve.

Genera.



Five Genera without regular Spines.



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